800-BLAST-IT www.marcousa.com

Dallas, TX • Davenport, IA • Harrisburg, PA • Houston, TX • New Orleans, LA • Savannah, GA

Autofax #00093802 **Updated:** 04/10/07 page 1 of 2

MSDS SHEET - COPPER SLAG - AZ

I. **Product Identification**

Trade Name as Labeled: Sharpshot

Manufacturer's Name: Minerals Research & Recovery, Inc.

Address: 4620 South Coach Drive Tucson, Arizona 85714

Emergency Telephone Number: 800-252-7848 Telephone Number for Information: 800-252-7848

II. **Chemical Ingredients**

Composition: 100% Copper Slag (Complex silicates and oxides of iron, silica, calcium, and aluminum)

		lypical	Fed OSHA	CA OSHA	ACGIH
Component	C.A.S. #	% Weight	PEL (mg/m ³)	PEL (mg/m^3)	TLV (mg/m ³)
Iron (Fe)	1309-37-1	30-35	10	5	5
Silica (SiO ₂)	7440-21-3	35-45	15	6	10
Aluminum Oxide (Al ₂ O ₃)	1344-28-1	5-15	15	10	10
Calcium Oxide (CaO)	1305-78-8	0-10	5	2	2
Magnesium Oxide (MgO)	1309-48-4	< 1	15	10	10
Crystalline Silica (SiO ₂)	480-86-07	<0.1	0.1	0.1	0.1

Please note that this product may contain some heavy metals in quantities less than 0.1% by weight, including arsenic (As) - typically <0.002% by weight; Fed and CA OSHA PEL = 0.01 mg/ m3, ACGIH TLV =0.01 mg/m3; and lead (Pb) - typically <0.002% by weight; Fed and CA OSHA PEL= 0.05 mg/m3; ACGIH TLV =0.05 mg/m3. Under extreme conditions (e.g. sandblasting in a confined space without sufficient ventilation), OSHA PELs could be exceeded. In these situations, employee exposure monitoring should be performed to determine exposure levels. You can contact us for further information.

Physical /Chemical III. **Properties**

Bulk Density: 110 - 120 lbs/ft³ Physical State: Granular

Specific Gravity: 3.4 - 3.6 pH: N/A

Appearance & Odor: Dull Black, Odorless Vapor Pressure: N/A

Boiling Point: N/A

Vapor Density: N/A Melting Point: Over 2000° F Evaporation Rate: N/A

IV. **Fire & Explosion Hazard Data**

Flash Point: N/A Lower Explosive Limit: N/A Autoignition Temparature: N/A Upper Exposure Limit: N/A Fire Hazard: N/A Explosion Hazard: N/A

Unusual Fire and Explosion Hazards: N/A

Extinguishing Media: N/A Special Fire Fighting Procedures: N/A

Reactivity Data V.

Stability: Stable

Incompatibility (Materials to Avoid): Strong mineral acids Hazardous Thermal Decomposition Products: None expected

Polymerization: Will Not Occur

MSDS SHEET - COPPER SLAG - AZ

VI. Health Hazard Data

Proper precautions should be taken to avoid any health hazard. A health hazard may occur if limits for air contaminants exceed PEL limits as per 29 CFR 1910.1000. Proper engineering controls and ventilation should be used to prevent air contaminants from exceeding PEL limits. NIOSH-approved respirators should be used during all abrasive blasting operations. (For information on potentially hazardous elements refer to Section 2.)

Updated: 04/10/07

Usual Route(s) of Entry: Inhalation of dust during handling or use Medical Conditions Possibly Aggravated by Exposure: Chronic diseases or disorders of the respiratory system.

VII. First Aid and Medical Emergency Procedures

Eye Contact: Not anticipated to pose an acute or significant eye contact hazard. In the event of eye contact, flush eyes with generous amounts of water.

Skin Contact: Not anticipated to pose an acute or significant skin contact hazard. Wash with soap and water as needed to remove from skin

Inhalation: Not anticipated to pose an acute or significant inhalation hazard if proper work practices are employed to maintain dust exposure below OSHA PEL's. If overexposure occurs, remove individual to area with fresh air until symptoms cease.

Ingestion: Not considered to be an ingestion hazard.

VIII. Precautions for Safe Handling and Use

Procedures to Follow if Material is Released or Spilled: Using appropriate personnel protective equipment, material should be swept or vacuumed or otherwise collected into appropriate containers.

Waste disposal method(s): Landfill disposal or other methods which are in accordance with local, state and federal regulations. Virgin (unused and uncontaminated) material does not exceed the Toxicity Characteristic Leaching Procedure (TCLP) hazardous waste limits per 40 CFR 261.3. Used or contaminated material should be tested in accordance with 40 CFR 262.11 or any applicable local or state regulations to determine if it is a hazardous waste and disposed of accordingly.

IX. Control Measures

Engineering Controls (Ventilation, etc): Ventilation should be sufficient to maintain dust levels below applicable exposure limit.

Work Practices (Handling & Storage, etc.): Avoid creating airborne dust during handling and use.

Eye Protection: Safety glasses, goggles or face shields are recommended during abrasive blasting or when dust levels are excessive.

Skin Protection: Gloves and long-sleeved clothing are recommended during abrasive blasting or when dust levels are excessive.

Respiratory Protection: When engineering controls are not sufficient to lower dust levels below the applicable exposure limit, use a NIOSH-approved respirator. NIOSH-approved respirators should be used during all abrasive blasting operations in accordance with 29 CFR 1910.134 (OSHA Respiratory Protection Program).

X. Additional Information

If material is being used for abrasive air blasting, proper protective clothing, eye protection and respiratory protection should be used in accordance with OSHA regulations. If air blasting is being performed in a confined area, proper ventilation should be used in accordance with OSHA regulations.

MSDS SHEET - COPPER SLAG - AZ

IX. Silicosis Warning

Breathing dust containing silica will cause silicosis, a fatal lung disease. Breathing dust during blasting operations will cause asbestosis, lead poisoning and/or other serious or fatal diseases. A NIOSH-approved, well-maintained, supplied-air abrasive blasting respirator must be used by anyone blasting, anyone handling or using the abrasive and anyone in the area of the dust. Harmful dust containing toxic material from abrasives or surfaces being blasted can remain suspended in the air for long periods of time after blasting has ceased. Failure to avoid the above danger will result in death or serious injury.

A DANGER You must comply with all OSHA, local, City, State, Province, Country and jurisdiction regulations, ordinances and standards, related to your particular work area and environment. Keep unprotected individuals out of the work area. Failure to avoid the above danger will result in death or serious injury.

DISCLAIMER: We believe that Minerals Research & Recovery's (MRR) copper slag products are not hazardous chemicals as defined by the U.S. Federal Occupational Safety and Health Hazard Communication Standard 29 CFR 1910.1200 (c). However, this should not be construed as a warranty that any MRR product is or is not a hazardous chemical under any applicable safety, or environmental statute, rule, or regulations. The use or application of any MRR product, whether or not used in conjunction with any other product, may result in the violation of safety or environmental statutes, rules or regulations as MRR has no control over how the MRR product is used, nor the possible contaminants that may exist on the surface to which it is applied. Therefore, there shall be no express or implied warranty that the spent MRR product conforms with applicable safety and/ or environmental statutes, rules or regulation. All sales of this product are subject to MRR's standard terms and conditions of sale. Further, MRR makes no warranties as to any of its products, express or implied, including the Implied Warranty of Merchantability, any implied warranty of fitness for a particular purpose or any implied warranties otherwise arising from course of dealing or trade. By acceptance of any MRR product, the buyer thereof agrees that MRR's liability for any claim for damages, including, but not limited to, remediation or cleanup costs shall not exceed the value of the goods provided. This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assume the risk of his use thereof, including any environmental restrictions or prohibitions that may apply.



For more information call:

800-BLAST-IT

Phone: 800-252-7848 Fax: 563-324-6258

e-mail: sales@marcousa.com

www.marcousa.com

